

TABLE B-continued

Demographic and Clinical Variables for PRO-129 Study		
Demographic	Gestation at Enrollment (weeks, days)	
	Demographic and Clinical Variables	
	<35 0/7 (n = 269)	35 0/7 to 36 6/7 (n = 135)
Endometriosis	5 (1.86%)	0 (0.00%)
Focal Segmental Glomerulosclerosis	1 (0.37%)	0 (0.00%)
Labor and Delivery		
Type of Labor		
No labor	94 (34.94%)	28 (20.74%)
Spontaneous	64 (23.79%)	27 (20.00%)
Augmented	5 (1.86%)	12 (8.89%)
Induced	106 (39.41%)	68 (50.37%)
Mode of Delivery		
Cesarean	143 (53.16%)	53 (39.26%)
Vaginal	126 (46.84%)	82 (60.74%)
Birth Weight in Grams (median, IQR)	3130 (862)	3138.5 (730)
Size for Gestational Age		
Small for GA (SGA)		
Appropriate for GA (AGA)		
Large for GA (LGA)		
GA at Delivery (median, IQR)	37.71 (2.57)	37.86 (2.00)
Preterm (<37 weeks' GA)	78 (29.00%)	24 (17.78%)
Full-term (\geq 37 weeks' GA)	191 (71.00%)	111 (82.22%)
APGAR (median, IQR)		
1 min	8 (1)	8 (1)
5 min	9 (0)	9 (0)
Intrauterine Fetal Demise (IUFD)	0 (0.00%)	0 (0.00%)

As part of this forward-looking rule out analysis, the samples from the PRO-129 study were re-segregated into either "cases" or "non-cases" as shown in FIG. 15B. As part of this scheme, the clinical status of a subject is considered "case" if the preeclampsia diagnosis happens within the rule-out window and subject delivers before 37 0/7 weeks of gestation, and the clinical status of a subject is considered as "non-case" if no diagnosis of Preeclampsia happens during the pregnancy or diagnosis of preeclampsia happens outside of the rule-out window or the diagnosis of preeclampsia happens within the rule-out-window but the subject delivers after 36 6/7 weeks of gestation.

As part of this forward-looking rule out analysis, the same % PLGF_{free}-based univariate model above with the Q25 threshold locked was used to rule-out preeclampsia when the % PLGF_{free} value was below the threshold. The performance parameters for this univariate model-based analysis applying a "rule out" window of 14 days based on the Q25 threshold are described in Table 1B below:

TABLE 1B

Performance Of % PLGF _{free} Model For Ruling Out Preeclampsia Over A Window Of 14 Days									
N	TP	TN	FP	FN	Sensitivity	Specificity	Prevalence	PPV	NPV
350	44	179	121	6	88.0 [76.2-94.4]	59.7 [54.0-65.1]	10%	19.5 [14.2-26.2]	97.8 [94.5-99.1]

Surprisingly, this model utilizing both PIGF-d and PIGF-f exhibited high performance even at a relatively stringent task—ruling out future preeclampsia in patients over a window of 14 days.

While preferred embodiments of the present invention have been shown and described herein, it will be obvious to those skilled in the art that such embodiments are provided by way of example only. Numerous variations, changes, and substitutions will now occur to those skilled in the art without departing from the invention. It should be understood that various alternatives to the embodiments of the invention described herein may be employed in practicing the invention. It is intended that the following claims define the scope of the invention and that methods and structures within the scope of these claims and their equivalents be covered thereby.

What is claimed is:

1. A method for determining levels of free and dissociated PIGF in a biological sample from a pregnant human female subject, the method comprising:

(a) isolating a first aliquot of the biological sample for the detection of PIGF-f and a second aliquot of the biological sample for the detection of PIGF-d;

(b) determining an amount of PIGF-f in the first aliquot;
(c) applying a treatment to the second aliquot to dissociate PIGF complexes; and
(d) determining an amount of PIGF-d in the second aliquot.